P190\ Interview_outline.wpd January 29, 2003 (8:43am)

The present invention involves modifying a ceramic honeycomb so the thermal expansion of the outer circumferential wall is greater than the thermal expansion coefficient (TCE) of an inside partition wall portion. This structure causes stress to be applied to the inside partition wall portion from the outer circumferential wall portion as described in Paragraph [0025] & also there the advantage: the thermal shock resistance is increased, making it much harder to cause a thermal rupture of the honeycomb.

Para /cls	Ref	Summary
1		w/draw final the Kuma US was in 2ndary in Para 7, now in Para 4 the EP version is 102 [discuss last]
2 1-7	112	"in a direction of a diameter" to measure the TEC (2 ways)[0020] P8 L16-17
3 /3	objection	no space between "0.1" and "mm" –now OK? We fixed last time
		Describe invention –quote above. Handout Para [0025] Handout Figs. 1 & 2 how we do it.
4 1	EP JUSPN Kumazawa 5 paras are cited	102 Exr has 2 parts it teaches, but it is just immersion coat with: 1. Gamma alumina with TEC > that of structural body 2. Volume shrink -generated when high temp is post-applied See P4L12-18 – but not teach apply to outside
	P3 L51-58	1. Just cuts out internal segment 1 cell square to measure TEC
	P3 L5-20	2. Test conditions & how to cut out specimens
	Table 1	3. Compares 3 Comp Ex (only heat 550-800°C) to Inv's Ex 1-3 where heat to 900-1100°C - Inv has the > TEC
	P4 L40-56	4. Bodies immersed in AlNO3 slurry - just applying wash coat - no mention of coating the outer surface
	P4 L16-25	5. Just uniformly coat internal partition walls - no intention to coat outside
		BL - not teach applying wash coat to <u>outside</u> of HC body
5 1,2,4	Hamaguchi '275	just coating the inside with the activated alumina washcoat w/high SA. It has >TEC than cordierite. We quote Para [0025] purpose. Not teach the outer <u>wall</u> is to have >TEC . In "Resp to Argu" –the Exr contends coating on outside of carrier is = to an outer circumferential wall. Exr Quotes 3:12-30 as an object. Handout Pg 12 w/quote Machida et al Fig. 5A prior art of cross-section. We contend the coating on the inside is uniform on all internal cells – not have a differential with the outer layer on the circumference

6 1,2,6	Machida '446	plugs inside the outer circumference to save wasted catalyst costs. Exr cites col. 6 L5-26 - but it merely tells how to examine cell stuffing areas Refer to Fig 2 –the stuffing. Cite 6:18 -sealed by silicone rubber sponge. Repeat again 2 ways we add the outer coating Fig. 1(b) [P12 L16 toP13 L3] & Fig 2(b). Out Table 2 shows superior results.
7 1,2	Kotani067--Kumazawa US '899	Kotani has outer coat to reduce cells from cracking (col. 2, lines 28-38). Exr admits not for TCE. Then Exr says Kuma w/its γ-alumina would provide excellent thermal shock resistance (TSR). We say what is motivation to give TSR to Kotani? Cracks form due to low mechanical strength (col 2 L12-24) of the green body. Kotani not want any coating for TSR. Kuma applies coating to just inside of cells & then heats (900° to 1100°C) to get TSR. Exr cites Table 1 & col 3 L65-col. 4 L46 that "TCE of inner body is smaller than outer carrier coating (outer body wall)" We don't find that teaching. No support in Kuma for coating outer wall –thus Kuma provides not motivation to change coating in Kotani
8 4,5	Machida –> Kotani	Machida not teach TEC of outer wall > inside. Kotani also fails to teach this relationship.
9 3-5	Machida –> Kotani & Beauseigneur	Beau - cited for various cells per unit area –not overcome the deficiency of primary refs. - not teaching TCE relationship. cite motivation to combine. Exr says cannot attack refs individually - Handout 3rd para MPEP 2143.02